

Office Action Summary

Application No.

10/035.343

Applicant(s)

CIMBORA ET AL

Examiner

Valarie Bertoglio

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 30days MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-161 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4 and 145-155, drawn to an isolated protein complex comprising two proteins, classified in class 530, subclass 350.
- II. Claims 5,6, 156 and 157, drawn to an isolated antibody reactive to a protein complex, classified in class 530, subclass 387.1.
- III. Claims 7-16, drawn to a method for diagnosing a physiological disorder in an animal by assaying whether a protein complex is present in an tissue extract, the ability of the proteins to form a complex and assaying for a mutation in a gene encoding a protein of the protein complex, classified in various classes and subclasses.
- IV. Claims 17-26, drawn to a method for determining whether a mutation in a gene is useful for diagnosing a physiological disorder by assaying the ability of the gene product to form a protein complex, classified in various classes and subclasses.
- V. Claims 27,28,29a,30-33, drawn to a non-human animal model wherein the genome has been modified to overexpress one of the proteins of a protein complex and cells obtained from said animal, classified in class 800, subclass 13.
- VI. Claims 27,28,29b and 30-33, drawn to a non-human animal model wherein the genome has been modified to replace a gene of at least one of the proteins of a protein complex and cells obtained from said animal, classified in class 800, subclass 13.
- VII. Claims 27,28,29c and 30-33, drawn to a non-human animal model wherein the genome has been modified to express a mutant form of one of the proteins of a

Art Unit: 1632

protein complex and cells obtained from said animal, classified in class 800;800, subclass 9;13.

- VIII. Claims 27,28,29d and 30-33, drawn to a non-human animal model wherein there is a lack of expression of one of the proteins of a protein complex and cells obtained from said animal, classified in class 800;800, subclass 9;13.
- IX. Claims 27,28,29e and 30-33, drawn to a non-human animal model wherein there is a reduction of expression of one of the proteins of a protein complex and cells obtained from said animal, 800;800, subclass 9;13.
- X. Claims 31-35, drawn to a non-human animal model wherein the biological activity of a protein complex has been disrupted using an antibody, classified in class 800, subclass 9.
- XI. Claims 31-33,36 and 37, drawn to a non human animal model wherein the biological activity or formation of a protein complex is disrupted by binding a small molecule, classified in class 800;800, subclass 9;13.
- XII. Claim 38, drawn to a recombinant cell line genetically modified to produce a protein complex, classified in class 435, subclass 325.
- XIII. Claim 39, drawn to a recombinant cell line genetically modified to eliminate a protein of a protein complex, classified in class 435, subclass 325.
- XIV. Claims 40-45, drawn to a composition comprising a first expression vector having a nucleic acid encoding a first protein and a second expression vector having a nucleic acid encoding a second protein wherein the proteins for a complex and cells comprising the vectors, classified in class 536;435, subclass 23.1;325.
- XV. Claims 46-52, drawn to an in vitro method for screening drug candidates capable of modulating the interaction of the proteins of a protein complex by determining

Art Unit: 1632

the effect of the drug on the formation of the complex, and the drug, classified in class 435, various subclasses.

- XVI. Claims 53-55, drawn to an in vitro method for screening drug candidates capable of modulating the activity of a protein complex and the drug, classified in class 435, subclass 4.
- XVII. Claims 56-58, drawn to a method of selecting modulators of a protein-protein interaction by determining binding of the test compound to the protein complex, classified in class 435, subclass 4.
- XVIII. Claims 59-61 and 64-70, drawn to a method of screening for modulators of a protein-protein interaction by determining the interaction between the proteins of a complex in the presence of a test compound in a cell-free environment, classified in class 435, subclass 4.
- XIX. Claims 59-70, drawn to a method of screening for modulators of a protein-protein interaction by determining the interaction between the proteins of a complex in the presence of a test compound in cells, classified in class 435, subclass 7.21.
- XX. Claims 71-74, drawn to a method for selecting modulators of an interaction between proteins of a protein complex by determining the effect of the modulator on reporter gene expression in recombinant cells; and the modulator, classified in class 435;435, subclass 7.1;325.
- XXI. Claims 75-77 and 84-88, drawn to a method for identifying a compound that binds to a protein in vitro, classified in class 435, subclass 7.1.
- XXII. Claims 78-83, drawn to a method of selecting modulators of an interaction between two polypeptides by providing atomic coordinates defining a three-dimensional structure of a protein complex, classified in class 702, subclass 27.

Art Unit: 1632

- XXIII. Claims 89-95, drawn to a method for modulating protein-protein interactions in a cell by administering a compound, classified in class 435;435, subclass 7.21;325.
- XXIV. Claims 96-102, drawn to a method of modulating neuronal death in a patient by modulating a protein complex, classified in class 514, subclass 2.
- XXV. Claims 103-112, drawn to a method of treating a physiological disorder in a patient by modulating a protein complex, classified in class 514, subclass 2.
- XXVI. Claims 113-116, drawn to a method of modulating protein activity of a single protein in a cell, classified in class 435, subclass 4.
- XXVII. Claims 117-143 and 161, drawn to a nucleic acid encoding SEQ ID NO:4 or comprising SEQ ID NO:3 and host cells comprising said nucleic acid, classified in class 435;536, subclass 325;23.1.
- XXVIII. Claim 144, drawn to a nucleic acid microarray encoding at least 10 contiguous amino acids of SEQ ID NO:4, class 435, subclass 287.2.
- XXIX. Claims 158-160, drawn to a protein microarray comprising SEQ ID NO:4, classified in class 435, subclass 287.2.

The inventions are distinct, each from the other because of the following reasons:

Inventions I,II,XIV, and XXVII-XXIX are patentably distinct because, the product of each invention differs in both composition and use and is classified differently. The protein complex of Invention I can be used to screen for modulators of protein-protein interactions. The antibody of Invention II can be used to immunoprecipitate proteins in a complex. The vectors of Invention XIV can be used to express proteins in cells. The nucleic acid of Invention XXVII, can be used as a probe to screen for presence or expression of a gene. The nucleic acid microarray of Invention XXVIII can be used to screen for compounds that bind regions of DNA. The protein microarray of Invention XXIX can be used to screen for compounds that bind specific portions of

Art Unit: 1632

a protein. The protocols and reagents required for each invention and the methods of using them are materially distinct and separate. The burden required to search Inventions I,II,XIV,XXVII-XXVIII or XXIX together would be undue.

Inventions I and Inventions III,IV, and XV-XXVI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case Invention I can be used for each of the patentably distinct methods of Inventions III,IV, and XV-XXVI. Furthermore, the burden required to search Invention I and Invention XII or XIII together would be undue.

Invention I and Inventions V-XI are patentably distinct because, the protein complex of Invention I can be used to generate antibody while the animals of Inventions V-XI can be used to screen for in vivo modulators. The protocols and reagents required for the protein complex and the animals are materially distinct and separate. The protein complex does not require the animals and the animals do not require the protein complex. The burden required to search Inventions I and Inventions V-X or XI together would be undue.

Invention I and Inventions XII and XIII are patentably distinct because the protein complex of Invention I can be used to generate antibody while the cells of Inventions XII and XIII can be used to screen for modulators or determine the effects of a protein on gene expression profiles. The protein complex does not require the cells and the cells do not require the protein complex. The burden required to search Inventions I and Invention XII or XIII together would be undue.

Inventions II and Inventions III,IV, and XV-XXVI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown:

Art Unit: 1632

(1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case Invention II can be used to isolate proteins, which is not a use for the processes of Inventions III, IV, and XV-XXVI. Furthermore, the burden required to search Inventions II and Invention XII or XIII together would be undue.

Invention II and Inventions V-XI are patentably distinct because, the antibody of Invention I can be used to detect the presence of a protein while the animals of Inventions V-XI can be used to screen for in vivo modulators. The protocols and reagents required for the antibody and the animals are materially distinct and separate. The antibody does not require the animals and the animals do not require the antibody. The burden required to search Inventions II and Inventions V-X or XI together would be undue.

Invention II and Inventions XII and XIII are patentably distinct because the antibody of Invention I can be used to detect the presence of a protein while the cells of Inventions XII and XIII can be used to screen for modulators or determine the effects of a protein on gene expression profiles. The antibody does not require the cells and the cells do not require the antibody. The burden required to search Inventions II and Invention XII or XIII together would be undue.

The methods of each of Inventions III, IV and XV-XXVI are materially different and plurally independent from each other because each is practiced with materially different process steps and technical considerations and requires materially distinct protocols and reagents. The methods of each Invention are drawn to a different purpose. The purpose of the methods of Invention III is to diagnose a physiological disorder by assaying for the presence of a protein complex, ability of proteins to form a complex, and presence of a mutation in a gene encoding a protein of the complex. The purpose of the methods of Invention IV is to determine whether a

Art Unit: 1632

mutation in a gene is useful in diagnosing a disorder by assaying the ability of a gene product to form a protein complex. The purpose of the methods of Invention XV is to screen drug candidates for modulators of a protein-protein interaction by determining the effect of the drug on formation of the complex. The purpose of the methods of Invention XVI is to screen drug candidates for the ability to modulate activity of a protein complex. The purpose of the methods of Invention XVII is to select modulators of protein-protein interaction by determining the binding of the test compound to the complex. The purpose of the methods of Invention XVIII is to screen for modulators of a protein-protein interaction by determining the interaction between the proteins in a cell free environment. The purpose of the methods of Invention XIX is to screen for modulators of a protein-protein interaction by determining the interaction between the proteins in a cellular environment. The purpose of the methods of Invention XX is to select modulators of a protein-protein interaction by determining the effect of the modulator on reporter gene expression in recombinant cells. The purpose of the methods of Invention XXI is to identify a compound that binds a protein in vitro. The purpose of the methods of Invention XXII is to select modulators of a protein-protein interaction by providing atomic coordinates defining a three dimensional structure of a protein complex. The purpose of the methods of Invention XXIII is to modulate a protein-protein interaction by administering a compound. The purpose of the methods of Invention XXIV is to modulate a neuronal death in vivo. The purpose of the methods of Invention XXV is to treat a physiological disorder in vivo. The purpose of the methods of Invention XXVI is to modulate activity of a single protein in a cell. The burden required to search Inventions III, IV, XV-XXV or XXVI together would be undue.

Invention III and Inventions V-XI are patentably distinct because, the methods of Invention III can be used to diagnose a physiological disorder while the animals of Inventions V-XI can be used to screen for in vivo modulators. The protocols and reagents required for the

Art Unit: 1632

methods and the animals are materially distinct and separate. The methods do not require the animals and the animals do not require the methods. The burden required to search Inventions III and Inventions V-X or XI together would be undue.

Invention III and Inventions XII and XIII are patentably distinct because the methods of Invention III can be used to diagnose a physiological disorder while the cells of Inventions XII and XIII can be used to screen for modulators or determine the effects of a protein on gene expression profiles. The methods do not require the cells and the cells do not require the methods. The burden required to search Inventions III and Invention XII or XIII together would be undue.

Invention III and Inventions XIV, XXVII-XXVIII or XXIX are patentably distinct because the methods of Invention III are drawn to diagnosing a physiological disorder while the protein complex of Invention I can be used to screen for modulators of protein-protein interactions, the antibody of Invention II can be used to immunoprecipitate proteins in a complex, the vectors of Invention XIV can be used to express proteins in cells, the nucleic acid of Invention XXVII can be used as a probe to screen for presence or expression of a gene, the nucleic acid microarray of Invention XXVIII can be used to screen for compounds that bind regions of DNA, and the protein microarray of Invention XXIX can be used to screen for compounds that bind specific portions of a protein. The methods are not required for the products and the products are not required for the methods. The burden required to search Invention III and Inventions XIV, XXVII-XXVIII or XXIX together would be undue.

Invention IV and Inventions V-XI are patentably distinct because, the methods of Invention IV can be used to determine whether a mutation in a gene is useful for diagnosing a physiological disorder while the animals of Inventions V-XI can be used to screen for in vivo modulators. The protocols and reagents required for the methods and the animals are materially

Art Unit: 1632

distinct and separate. The methods do not require the animals and the animals do not require the methods. The burden required to search Inventions IV and Inventions V-X or XI together would be undue.

Invention IV and Inventions XII or XIII are patentably distinct because the methods of Invention IV can be used to determine whether a mutation in a gene is useful for diagnosing a physiological disorder while the cells of Inventions XII and XIII can be used to screen for modulators or determine the effects of a protein on gene expression profiles. The methods do not require the cells and the cells do not require the methods. The burden required to search Inventions IV and Invention XII or XIII together would be undue.

Invention IV and Inventions XIV, XXVII-XXVIII or XXIX are patentably distinct because the methods of Invention IV can be used to determine whether a mutation in a gene is useful for diagnosing a physiological disorder while the protein complex of Invention I can be used to screen for modulators of protein-protein interactions, the antibody of Invention II can be used to immunoprecipitate proteins in a complex, the vectors of Invention XIV can be used to express proteins in cells, the nucleic acid of Invention XXVII can be used as a probe to screen for presence or expression of a gene, the nucleic acid microarray of Invention XXVIII can be used to screen for compounds that bind regions of DNA, and the protein microarray of Invention XXIX can be used to screen for compounds that bind specific portions of a protein. The methods are not required for the products and the products are not required for the methods. The burden required to search Invention IV and Inventions XIV, XXVII-XXIX or XXIX together would be undue.

Inventions V-XI are patentably distinct because they encompass genetically, structurally and phenotypically distinct animals that are made using different methods and technical considerations. Inventions V-VII are drawn to transgenic animals wherein the genome has been

Art Unit: 1632

modified to overexpress a transgene (Invention V), the replace a gene (Invention VI), or to express a mutant form of a protein (Invention VII). Invention VIII encompasses a non-transgenic animal lacking expression of a protein. Invention IX encompasses a non-transgenic animal with reduced expression of a protein. Inventions X and XI are non-transgenic animals where activity of a protein is disrupted with an antibody (Invention X) or a small molecule (Invention XI). The burden required to search Inventions V -X or XI together would be undue.

Inventions V-XI and Inventions XII or XIII are patentably distinct because the animals of Inventions V-XI can be used to screen for in vivo modulators of a protein complex while the cells of Inventions XII or XIII can be used determine the effects of a protein on gene expression profiles. The animals do not require the cells and the cells do not require the animals. The burden required to search Inventions V-X or XI and Inventions XII or XIII together would be undue.

Inventions V-XI and Inventions XIV,XXVII-XXVIII or XXIX are patentably distinct because the animals of Inventions V-XI can be used to screen for in vivo modulators of a protein complex activity while the protein complex of Invention I can be used to generate antibody, the antibody of Invention II can be used to immunoprecipitate proteins in a complex, the vectors of Invention XIV can be used to express proteins in cells, the nucleic acid of Invention XXVII can be used as a probe to screen for presence or expression of a gene, the nucleic acid microarray of Invention XXVIII can be used to screen for compounds that bind regions of DNA, and the protein microarray of Invention XXIX can be used to screen for compounds that bind specific portions of a protein. The methods are not required for the products and the products are not required for the methods. The burden required to search Inventions V-X or XI and Inventions XIV,XXVII-XXVIII or XXIX together would be undue.

Art Unit: 1632

Inventions XII and XIII are patentably distinct because the cells of each invention are genetically, structurally and phenotypically different and require different reagents, methods and technical considerations for making and using. The cells of Invention XII are genetically modified to produce a protein complex. The cells of Invention XIII are genetically modified to eliminate a protein of a protein complex. The burden required to search Inventions XII and XIII together would be undue.

Inventions XII or XIII and Inventions XIV, XXVII-XXVIII, or XXIX are patentably distinct because the cells of Inventions XII and XIII can be used to screen for modulators or determine the effects of a protein on gene expression profiles while the nucleic acid of Invention XXVII can be used as a probe to screen for presence or expression of a gene, the nucleic acid microarray of Invention XXVIII can be used to screen for compounds that bind regions of DNA, and the protein microarray of Invention XXIX can be used to screen for compounds that bind specific portions of a protein. The cells are not required for the products and the products are not required for the cells. The burden required to search Inventions XII or XIII and Inventions XXVII-XXVIII or XXIX together would be undue.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

1) This application contains claims directed to the following patentably distinct species of the claimed invention:

Group A

i) IKKB; ii) IKKa; iii) IKKg; iv) IKK-I

Group B

i) LDHM; ii) EIF3S10; iii) SLAP2; iv) KIAA0614; v) SART1; vi) GBDR1; vii) TRAF; viii)

NUMA1; ix) SPA-1; x) PN13730.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution from Group A and a corresponding, single disclosed species for prosecution from Group B, on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

2) This application contains claims directed to the following patentably distinct species of the claimed invention:

i) inflammatory disease; ii) rheumatoid arthritis; iii) osteoarthritis; iv) asthma; v) arteriosclerosis; vi) inflammatory bowel disease; vii) cancer.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 7,8,10,11,13-19,21-27,29-31,33-37, 51,53-56,66,69,73,76, 79,82,87,96,98,100-103, 105-107, and 109 are generic.

3) This application contains claims directed to the following patentably distinct species of the claimed invention:

i) a compound which is capable of interfering with the interaction between said first protein and said second protein; a compound which is capable of binding at least one of said first protein and said second protein; a compound which comprises a peptide having a contiguous span of amino acids of at least 4 amino acids of said protein and capable of binding said first protein; a compound which comprises a peptide having capable of binding said first

Art Unit: 1632

protein and having an amino acid sequence of from 4 to 30 amino acids that is at least 75% identical to a contiguous span of amino acids of said second protein of the same length; a compound which comprises a peptide having a contiguous span of amino acids of at least 4 amino acids of said protein and capable of binding said second protein; and a compound which comprises a peptide having capable of binding said second protein and having an amino acid sequence of from 4 to 30 amino acids that is at least 75% identical to a contiguous span of amino acids of said first protein of the same length;

ii) a compound which is an antibody immunoreactive with said first or second protein;

iii) a compound which is a nucleic acid encoding an antibody immunoreactive with said first or second protein;

iv) a compound which modulates the expression of said first protein or said second protein; and a compound which is an antisense compound or a ribozyme specifically hybridizing to a nucleic acid encoding said first protein or complement thereof;

v) a compound which modulates the expression of said first protein or said second protein; and a compound which is an antisense compound or a ribozyme specifically hybridizing to a nucleic acid encoding said second protein or complement thereof;

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 89,98,103,109 are generic.

4) This application contains claims directed to the following patentably distinct species of the claimed invention:

i) penetratins; ii) *l*- or *d*-Tat49-57; iii) retro-inverso isomers of *l*- or *d*-Tat49-57; iv) L or D-arginine oligomers; v) L or D-lysine oligomers; vi) L or D-histidine oligomers; vii) L or D-ornithine

Art Unit: 1632

oligomers; viii) short peptide sequences derived from fibroblast growth factor; ix) Galparan; x) HSV-1 structural protein VP22 and peptide analogs thereof.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

5) This application contains claims directed to the following patentably distinct species of the claimed invention:

i) a compound which interferes with the interaction between a protein and a ligand; a compound which binds to said protein or said ligand; a compound which comprises a peptide having a contiguous span of amino acids of at least 4 amino acids of said protein and capable of binding said ligand; and a compound which comprises a peptide capable of binding said ligand and having an amino acid sequence from 4 to 30 amino acids that is at least 75% identical to a contiguous span of amino acids of said protein of the same length;

ii) a compound which is an antibody immunoreactive with said protein or said ligand;

iii) a compound which is a nucleic acid encoding an antibody immunoreactive with said protein or said ligand;

iv) a compound which modulates expression of said protein or said ligand; and a compound which is an antisense compound or ribozyme specifically hybridizing to a nucleic acid encoding said ligand or said protein or complement thereof.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 93 is generic.

6) This application contains claims directed to the following patentably distinct species of the claimed invention:

Art Unit: 1632

i) a compound which is capable of binding said protein; a compound which comprises a peptide having a contiguous span of amino acids of at least 4 amino acids of a first protein and capable of binding a second protein; and a compound which comprises a peptide capable of binding a second protein and having an amino acid sequence from 4 to 30 amino acids that is at least 75% identical to a contiguous span of amino acids a first protein of the same length;

ii) a compound which is an antibody immunoreactive with said protein;

iii) a compound which is a nucleic acid encoding an antibody immunoreactive with said protein;

iv) a compound which is an antisense compound or ribozyme specifically hybridizing to a nucleic acid encoding said protein or complement thereof.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 113 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species

Art Unit: 1632

to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.


Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Valarie Bertoglio whose telephone number is 703-305-5469. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Reynolds can be reached on 703-305-4051. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Valarie Bertoglio
Patent Examiner


DEBORAH J. REYNOLDS
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